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審査官 石川 伸一

## (54) 【考案の名称】 テレビジョン受像機

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## 【実用新案登録請求の範囲】

【請求項1】 テレビジョン受像機に於いて、筐体内に備えたテレビジョン受像機用のメイン基板と、同メイン基板に接続したインターフェース基板と、同インターフェース基板の一面に備えた複数の接続端子と、同複数の接続端子と相対する複数の開口部を備えたりアカバーとから成り、同アカバーを前記筐体の背面に係止し、前記複数の開口部を押通して前記複数の接続端子それぞれに付加機能ユニットをそれぞれ装着して電気的に接続することを特徴とするテレビジョン受像機。

【請求項2】 前記付加機能ユニットがTVチューナ、衛星放送受信チューナ、文字放送受信用装置、セキュリティ装置、テレビ電話装置、ミニバス装置、ゴーストキャンセラ装置、AVスイッチャー装置、パソコン通信装置等はそれそれに構成されており、このため、個々の機能を有す

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## 【考案の詳細な説明】

## 【産業上の利用分野】

本考案は、テレビジョン受像機を活用して他の音声、映像、情報等の付加機能ユニットを追加して、多くの要求ある機器を簡単に拡張構成できる様にしたものである。

## 【従来の技術】

従来のテレビジョン受像機は、テレビジョン受像機のみの機能を有する単体を構成し、TVチューナ、衛星放送受信チューナ、文字放送受信用装置、セキュリティ装置、テレビ電話装置、ミニバス装置、ゴーストキャンセラ装置、AVスイッチャー装置、パソコン通信装置等はそれそれに構成されており、このため、個々の機能を有す

ます。

JAPANESE [JP,07-056550,Y]

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CLAIMS DETAILED DESCRIPTION TECHNICAL FIELD PRIOR ART EFFECT OF THE INVENTION  
TECHNICAL PROBLEM MEANS OPERATION EXAMPLE DESCRIPTION OF DRAWINGS DRAWINGS

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CLAIMS

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[Utility model registration claim]

[Claim 1] The Maine substrate for television receivers which it had in the case in the television receiver, The interface substrate linked to this Maine substrate, and two or more connection terminals with which the whole surface of this interface substrate was equipped, It consists of the rear cover equipped with two or more openings which face the connection terminal of this plurality. The television receiver characterized by stopping this rear cover at the tooth back of said case, inserting in said two or more openings, equipping said each of two or more connection terminals with an option unit, respectively, and connecting with them electrically.

[Claim 2] The television receiver given in a claim (1) with which said option unit consists of TV tuner, a satellite broadcasting service receiving tuner, the equipment for teletext reception, security equipment, TV phone equipment, mini bus equipment, ghost canceller equipment, AV switcher equipment, a personal computer communication device, etc.

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## DETAILED DESCRIPTION

[Detailed explanation of a design]

[Industrial Application]

this design -- a television receiver -- utilizing -- option units, such as other voice, an image, and information, -- adding -- many \*\*\*\* -- it can be made to carry out the extended configuration of a certain device simply.

[Description of the Prior Art]

The conventional television receiver constituted the simple substance which has the function of only a television receiver, and TV tuner, a satellite broadcasting service receiving tuner, the equipment for teletext reception, security equipment, TV phone equipment, mini bus equipment, ghost canceller equipment, AV switcher equipment, a personal computer communication device, etc. are constituted by each, and, for this reason, were carrying out the joint configuration of the equipment of the simple substance with which the magnitude which has each function differs by the communication wire. That is, it was what connects the equipment of each above to a television receiver by the connecting cord.

[Problem(s) to be Solved by the Device]

Even if the above-mentioned conventional fault is manufactured by each in each equipment and it has the function of two metaphors, it only stored in one case. This sake, When each equipment and television receiver with which magnitude differs are arranged, In case it connects with said television receiver by the connecting cord of the signal which needs excessive SUBESU for arranging and connects between said each equipment, while needing said connecting cord Said connecting cord wandered near said television receiver and said each equipment, and there was an unsightly problem on a fine sight.

[The means for solving a technical problem]

The Maine substrate for television receivers which it had in the case in the television receiver about this design in order to solve the above-mentioned technical problem, The interface substrate linked to this Maine substrate, and two or more connection terminals with which the whole surface of this interface substrate was equipped, It consists of the rear cover equipped with two or more openings which face the connection terminal of this plurality. This rear cover is stopped at the tooth back of said case, said two or more openings are inserted in and the television receiver which can equip said each of two or more connection terminals with an option unit, respectively, and can be electrically connected to them is offered.

[Function]

According to the above-mentioned configuration, it is in the television television inside of a plane, and the interface substrate equipped with two or more connection terminals is connected to the Maine substrate, said each of two or more connection terminals are equipped with an option unit, respectively by stopping the rear cover equipped with two or more openings which face the connection terminal of this plurality at the tooth back of a case, and inserting in said two or more openings, and it connects electrically.

[Example]

Hereafter, the example of this design is explained based on a drawing.

The front cabinet 1 which drawing 1 is a decomposition perspective view of the wearing procedure which shows one example of this design, and are some cases which constitute a television receiver was formed, the front cabinet 1 was equipped with the first opening 2 used as the image side of the picture tube 4, and the rail section 3 which forms another opening equipped with the loudspeaker 5 for voice, and inserts the Maine substrate 6 further for television receivers is formed.

The picture tube 4 has inserted the deflecting yoke 14.

The Maine substrate 6 carries various electrical parts, such as the jack which constitutes an electrical circuit on the

whole surface of the Maine substrate 6 as a television receiver, resistance, a capacitor, a switch, volume, a tuner, a transformer, IC, a transistor, diode, a coil, and a connector.

The electrical circuit which carried out the printed circuit is constituted to the other sides or both sides of the Maine substrate 6, and the breakthrough which fits the electrode foot of an electrical part in two or more copper foil patterns to energize and a copper pattern is drilled in them.

After fitting an electrode foot in the breakthrough of said pattern, automatic soldering according the electrode foot which projected from the breakthrough, and said pattern to a solder DIP, or soldering by the Handa \*\* is performed, and it connects electrically. Furthermore, the whole surface is equipped with two or more connection terminals 8, and installation immobilization of the interface substrate 7 which constitutes common circuits, such as supply of an image, voice, and a power source, is carried out at end-fire array.

A rear cover 9 constitutes said some of cases, and forms two or more second opening 10 which faces two or more connection terminals 8 with which the interface substrate 7 was equipped.

The option unit 11 consists of TV tuner, a satellite broadcasting service receiving tuner, the equipment for teletext reception, security equipment, TV phone equipment, mini bus equipment, ghost canceller equipment, AV switcher equipment, a personal computer communication device, etc., equips each option unit 11 with two or more connection terminals 8 with which the interface substrate 7 was equipped, and the connection material 12 which can carry out direct continuation, and is not equipped with the interconnection cable which connection with the connection terminal 8 takes. That is, in case each functional unit is operated within the interface substrate 7 if needed, it can control by one microcomputers, such as existence of supply of a power source, intermittence of a signal, and a frequency, control of a channel, intensively.

And two or more connection terminals 8 which inserted anchoring and the Maine substrate 6 which carried out installation immobilization of the interface substrate 7 further at the rail section 3 by the conclusion members 13, such as a screw, and equipped each second opening 10 and interface substrate 7 of a rear cover 9 with the picture tube 4 and a loudspeaker 5 are set by the front cabinet 1, a rear cover 9 and a front cabinet 1 are stopped, and a television receiver is completed.

After an appropriate time, the option unit 11 of each above is inserted in each second opening 10 of a rear cover 9, each connection terminal 8 which equipped the interface substrate 7 with the connection material 12 with which each option unit 11 was equipped is equipped, and the interface substrate 7 and the option unit 11 are electrically connected by this wearing.

#### [Effect of the Device]

Since this design is constituted as above-mentioned, it does so the effectiveness indicated below.

Are in the television television inside of a plane, and the interface substrate equipped with two or more connection terminals is connected to the Maine substrate. The rear cover equipped with two or more openings which face the connection terminal of this plurality is stopped at the tooth back of a case. Said two or more openings are inserted in. For said each of two or more connection terminals TV tuner, A satellite broadcasting service receiving tuner, the equipment for teletext reception, security equipment, TV phone equipment, mini bus equipment, ghost canceller equipment, AV switcher equipment, Since equip with the option unit which consists of a personal computer communication device etc., respectively, it connects electrically, and two or more combination of a function can be simply constituted among each above-mentioned equipment and it is combined within one case, By having removed the connecting cord which does not need excessive SUBESU for arranging each of said equipment and television receiver with which magnitude differs, and connects each of said equipment and said television receiver It has the advantage of being able to connect without said connecting cord's wandering near the device and spoiling a fine sight.

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TECHNICAL FIELD

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[Industrial Application]

this design -- a television receiver -- utilizing -- option units, such as other voice, an image, and information, -- adding -- many \*\*\*\* -- it can be made to carry out the extended configuration of a certain device simply.

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PRIOR ART

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[Description of the Prior Art]

The conventional television receiver constituted the simple substance which has the function of only a television receiver, and TV tuner, a satellite broadcasting service receiving tuner, the equipment for teletext reception, security equipment, TV phone equipment, mini bus equipment, ghost canceller equipment, AV switcher equipment, a personal computer communication device, etc. are constituted by each, and, for this reason, were carrying out the joint configuration of the equipment of the simple substance with which the magnitude which has each function differs by the communication wire. That is, it was what connects the equipment of each above to a television receiver by the connecting cord.

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**EFFECT OF THE INVENTION**

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**[Effect of the Device]**

Since this design is constituted as above-mentioned, it does so the effectiveness indicated below.

It is in the television television inside of a plane, the interface substrate equipped with two or more connection terminals is connected to the Maine substrate, the rear cover equipped with two or more openings which face the connection terminal of this plurality is stopped at the tooth back of a case, and said two or more openings are inserted in. For said each of two or more connection terminals, TV tuner, a satellite broadcasting service receiving tuner, The equipment for teletext reception, security equipment, TV phone equipment, mini bus equipment, It is what equips with the option unit which consists of ghost canceller equipment, AV switcher equipment, a personal computer communication device, etc., respectively, and is connected electrically. Since two or more combination of a function can be simply constituted among each above-mentioned equipment and it is combined within one case, By having removed the connecting cord which does not need excessive SUBESU for arranging each of said equipment and television receiver with which magnitude differs, and connects each of said equipment and said television receiver It has the advantage of being able to connect without said connecting cord's wandering near the device and spoiling a fine sight.

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TECHNICAL PROBLEM

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[Problem(s) to be Solved by the Device]

The above-mentioned conventional fault is manufactured by each in each equipment. Even if it has the function of two metaphors, it only stored in one case. This sake, When each equipment and television receiver with which magnitude differs are arranged, In case it connects with said television receiver by the connecting cord of the signal which needs excessive SUBESU for arranging and connects between said each equipment, while needing said connecting cord Said connecting cord wandered near said television receiver and said each equipment, and there was an unsightly problem on a fine sight.

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MEANS

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[The means for solving a technical problem]

The Maine substrate for television receivers which it had in the case in the television receiver about this design in order to solve the above-mentioned technical problem, It consists of the rear cover equipped with two or more openings which face the interface substrate linked to this Maine substrate, two or more connection terminals with which the whole surface of this interface substrate was equipped, and the connection terminal of this plurality, and this rear cover is stopped at the tooth back of said case, said two or more openings are inserted in and the television receiver which can equip said each of two or more connection terminals with an option unit, respectively, and can be electrically connected to them is offered.

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## OPERATION

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### [Function]

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**EXAMPLE****[Example]**

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The Maine substrate 6 carries various electrical parts, such as the jack which constitutes an electrical circuit on the whole surface of the Maine substrate 6 as a television receiver, resistance, a capacitor, a switch, volume, a tuner, a transformer, IC, a transistor, diode, a coil, and a connector.

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## DESCRIPTION OF DRAWINGS

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### [Brief Description of the Drawings]

Drawing 1 is a decomposition perspective view of the wearing procedure which shows one example of this design. the inside of drawing, and 1 -- a front cabinet and 2 -- the first opening and 3 -- the rail section and 4 -- the picture tube and 5 -- a loudspeaker and 6 -- the Maine substrate and 7 -- an interface substrate and 8 -- for the second opening and 11, as for connection material and 13, an option unit and 12 are [ a connection terminal and 9 / a rear cover and 10 / a conclusion member and 14 ] deflecting yokes.

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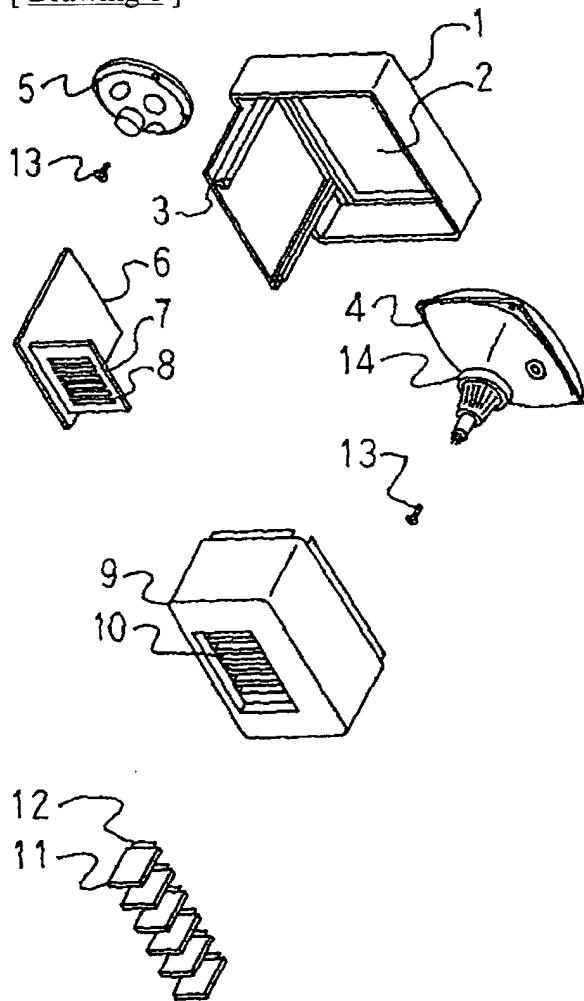
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**DRAWINGS****[ Drawing 1 ]**

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